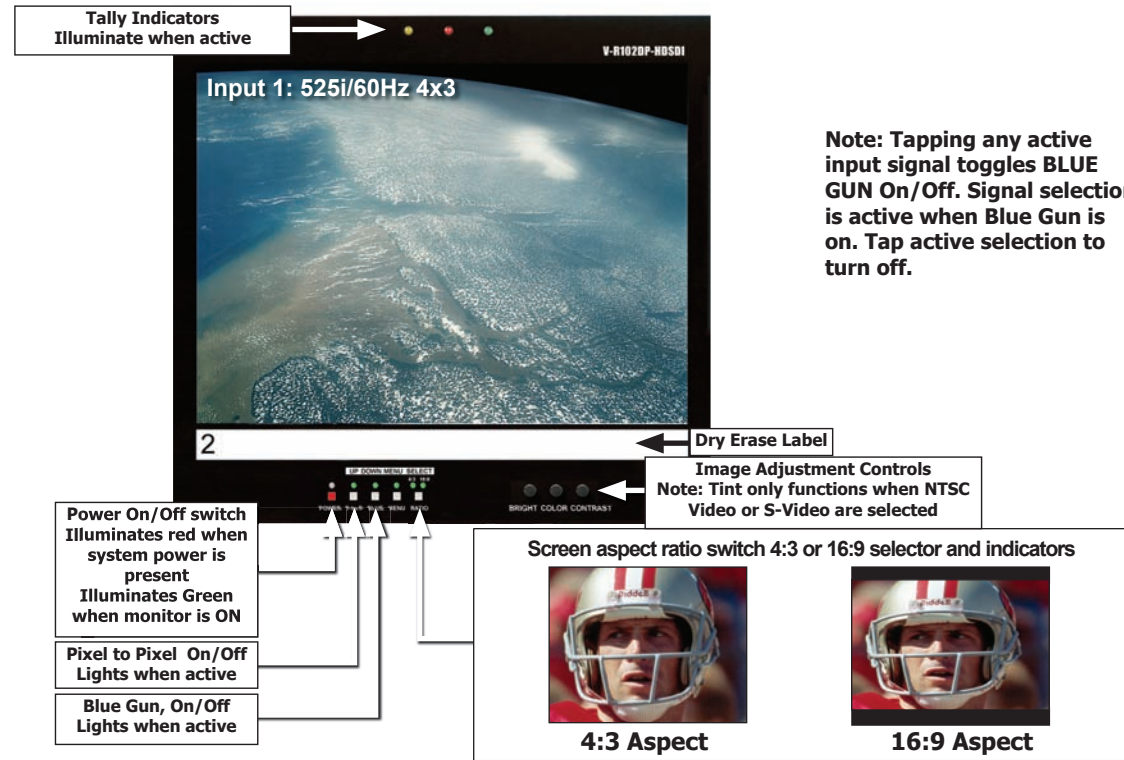


8 Switch Settings, Adjustments and Indicators



Note: Tapping any active input signal toggles BLUE GUN On/Off. Signal selection is active when Blue Gun is on. Tap active selection to turn off.

9 Pixel to Pixel Function

As the native LCD display is 800 pixels wide by 600 pixels high, it is necessary to change the size of the image to fill the whole screen. Pixel to Pixel mode bypasses the enlargement or scaling function and displays the native incoming format. For 625/525- based images, pixel to pixel will appear as a 480x640 (4:3 aspect) or 480x720 (16:9 aspect) display. For 720P/1080i/1080P based images, pixel to pixel will appear as an enlargement displaying the center 800x600 pixel grouping.

10 Menu Functions

Turn On/Off with **Menu** button.

Use **Up** (P-P), **Dn** (Blue), and **Select** (Ratio) for menu navigation functions.

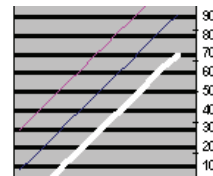
Color Temperature – Select D65 or User. User mode will automatically be turned on if Gain or Bias are adjusted.

Adj Color Gain – Select to adjust RGB gains. **Adj Color Bias** – Select to adjust RGB bias

OSD – Toggle OSD on/off. **Version Number** – Display only

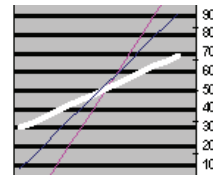
Gain Adjustment

Press **Up** (P-P), **Dn** (Blue), to navigate. Chart legend: Left Line = Increase of gain
 Press **Select** (Ratio) to activate. Center Line = D65 (Default)
 Press **Select** to toggle R, G, or B Right Line = Decrease of gain
 Press **Up, Dn**, to change value.
 Press **Menu** to exit



Bias Adjustment

Press **Up** (P-P), **Dn** (Blue), to navigate. Chart legend: Right Line = Increase of Bias
 Press **Select** (Ratio) to activate. Center Line = D65 (Default)
 Press **Select** to toggle R, G, or B Left Line = Decrease of Bias
 Press **Up, Dn**, to change value.
 Press **Menu** to exit



OSD Adjustment

Press **Up** (P-P), **Dn** (Blue), to navigate.
 Press **Select** (Ratio) to toggle OSD On/Off

11 Warranty

Marshall Electronics warrants to the first consumer, that this V-R102DP-HDSOI Dual 10.4-inch LCD rack mounted monitor set will, under normal use, be free from defects in workmanship and materials, when received in its original container, for a period of one year from the purchase date.

This warranty is extended to the purchasing end user only and proof of purchase is necessary to honor the warranty. If there is no proof of purchase provided with a warranty claim, Marshall Electronics reserves the right not to honor the warranty set forth above. Therefore, labor and parts may be charged to you.

This warranty does not apply to product exterior and cosmetics. Misuse, abnormal service or handling, improper alterations or modifications in design or construction, voids this warranty. No sales personnel of the seller, nor any other person is authorized to make any warranties other than those described above, or to extend the duration of any warranties on behalf of Marshall Electronics, beyond the time period described above.

An extra note about LCD displays: It is considered normal for a minimal amount of pixels, not to exceed three, to fail on the periphery of the display active viewing area. Marshall Electronics has the option to reserve service for display pixel failure if deemed unobtrusive to effective use of the monitor by our technicians. Due to constant effort to improve products and product features, specifications may change without notice.

Marshall Electronics

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V-R102DP-HDSOI Users Guide

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1 Product Overview

The Rack mounted and tiltable V-R102DP-HDSDI represents leading edge technology in LCD imaging for broadcast and professional video applications featuring High Resolution, 1.44 megapixel, TFT screens with completely digital signal processing. All video formats are scaled to fit on screen in the highest resolution using a state of the art LSI that incorporates 4x4 pixel interpolations with precision Gamma correction.

2 Features

- **TFT-MegaPixel™ totally digital end to end signal processing**
- **One HDSDI/SDI (SMPTE259M/292M) (ITR-U601) input per screen**
- **Reclocked HDSDI/SDI output of on screen video**
- **ColorMatch Conversion™ D65 and SMPTE/EBU color space emulation of CRT**
- **User control for gain and bias of Red, Green, and Blue colors**
- **HyperProcess™ motion interpolation of interlace images**
- **On screen display of input status, formats, and menu functions**
- **Pixel to Pixel native resolution display**
- **Ready to mount – all brackets are factory installed**
- **Lightweight – 75% lighter than CRT models**
- **Direct access for screen adjustments and selections.**
- **Settings memory restores active state with power off/on cycle**
- **Easy to use front panel selection of inputs**
- **Blue Gun for adjustment to SMPTE color bars**
- **Includes V-PS12-5V-1 Universal power supply (U.L. class 2)**
- **Three LEDs (Red, Green, Amber) produce 7 different tally indications**
- **Unique 180 degree tilt adjustment**
- **Dry erase label for each screen**



3 Electrical Specifications

| | |
|------------------------------------|---|
| Number of Screens | 2 |
| Screen Aspect | 4:3 / 16:9 switchable from front panel |
| Display (Viewing Area) | 10.4 Inch diagonal (211.2mm w x 158.4mm h) |
| Viewing Angles | 160° with protective screen and treatment (130°H x 120°V native) |
| Resolution (RGB Dots) | 800H×RGB×600V (1.44 million pixels) |
| Dot Pitch | .264mm square pixel |
| Contrast Ratio | 500:1 |
| Pixel Response | 10ms rise / 25ms fall |
| Brightness (in cd/m ²) | 400 cd/m ² |
| Backlight | Field Replaceable CCFL (50,000 hour half life) |
| LCD Screen Treatments | Anti Reflection, Anti Glare, Hard Coat |
| Estimated MTBF | 5 years of 24/7/365 operation |
| System | NTSC / PAL auto recognition |
| Inputs per display | HDSDI/SDI (SMPTE259M, 292M) (ITR-U601) per screen (BNC) |
| Active Outputs | 1 HDSDI/SDI per screen (BNC) |
| Color temperature | D65 (6500°Kelvin) |
| Color Gamut | SMPTE-C/EBU |
| Luma Linearity | Typical +/- 3% with 5 ire increments (0 to 10 ire) |
| Power Required | 10.4 to 16.8 VDC |
| Power Consumption | Approx. 30 watt nominal |
| Operating temperature | 32°F to 120°F (0°C to 50°C) |
| Storage temperature | -4°F to 120°F (-20°C to 50°C) |
| Compliance | CE, FCC-Class A, ANSI-63.4 (Certificates on file) |
| RoHS WEE / Environmental | Do not dispose. Return to Manufacturer or Authorized Recycle Facility |

4 Mechanical Specifications

| | |
|---------------------------------|---|
| Dimensions | 19.12" w x 8.67" h x 1.5" d (485.7mm x 220.22mm x 38.1mm) |
| V-R102DP-HDSDI Weight | 5.5 lbs (2.4 kg) |
| V-PS12-5V-1 Power Supply Weight | 1 lbs (0.45kg) |

5 Digital Screen Formats and Frame Rates

All signal types and frame rates are automatically detected

- 525 –60i / 625 - 50i (Interlaced NTSC/PAL)
 - 720 x 486P (Progressive 30P)
 - 720 x 576P (Progressive 25P)
 - 720 x 1280 – 23.97P, 24P, 25P, 50P, 59.94P, 60P (Progressive)
 - 1035 x 1920 - 59.94i, 60i (Interlaced)
 - 1080 x 1920 – 50i, 59.94i, 60i / 23.973Psf, 24Psf, 25Psf, 29.97Psf, 30Psf
- Psf=Progressive or Segmented Frame formats

6 Operational Setup

1. Unpack the V-R102DP-HDSDI and accompanying V-PS12-5V-1 power supply. Physically inspect for any damage that may have occurred during shipping. Should there be any damage, immediately contact Marshall Electronics at 800-800-6608. If you are not located within the continental united states call +1 310-333-0606.
2. After inspection, install in your desired location of a standard EIA 19-inch equipment rack. Adequate ventilation is required when installed to prevent possible damage to the V-R102DP-HDSDI internal components.
3. Connect required cables for signal input and output. Please note that power must be applied to the V-R102DP-HDSDI for all outputs to be activated. All BNC connectors should be rated for 75Ω.
4. Plug the V-PS12-5V-1 power supply into the A.C. source
5. Attach twist lock power connection from V-PS12-5V-1 power supply to the back of the unit.
6. Turn on the V-R102DP-HDSDI by depressing the power switch located on the front of the unit.

7 Connectors

* Tally lamps active when connected to ground

